15. *LAELIA ADALIA* SWINHOE (*LAELIA EXCLAMATIONIS* KOLL.) (LYMANTRIIDAE: LEPIDOPTERA): A NEW PEST OF GUINEA GRASS IN SOUTH INDIA

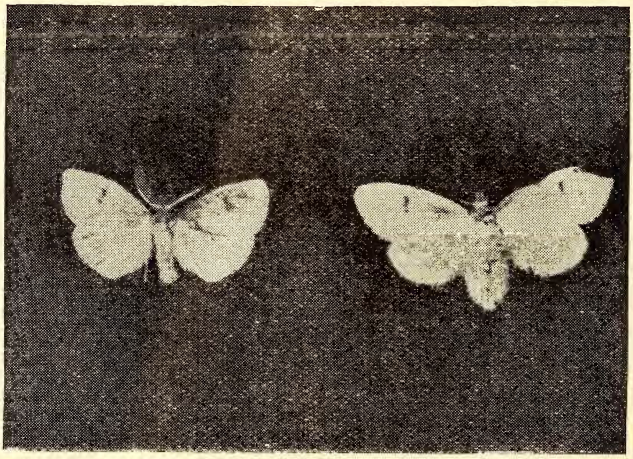
(*With a photograph*)

Introduction

Guinea grass (*Panicum maximum*) is a perennial grass, which has of late become extremely popular as a succulent and nutritious green fodder, particularly for milch cattle. A few municipalities have ventured to cultivate this grass, among which Madurai deserves special mention. A small beginning appears to have been made during 1927 and the area has been gradually extended up to 128 acres at present, ensuring a steady and uniform supply of this excellent fodder.

Recently, a hairy caterpillar *Laelia adalia* Swinhoe (*Laelia exclamationis* Koll.) was found to occur in large numbers and devastate the crop. Hampson (1892) mentions of this species as occurring in NW. Himalaya, Sikkim, and throughout India and Ceylon, without details of either the actual distribution in the South or the host plants.

As this is the first record of the species occurring in a serious form in south India, a short account on its incidence, life-history, etc., may be of some interest.



Laelia adalia Swinhoe (*Laelia exclamationis* Koll.)
Left: Male moth; Right: Female moth. (About actual size)

The Pest and its Season of Incidence

The caterpillars appeared first in pest form at the Municipal Sewage Farm, Madurai, during May 1950 and continued with unabated

virulence till July. A recrudescence of the pest was noted during December 1952 and the incidence was protracted till February 1953. The next outbreak was noted during November 1958, after a lapse of five years. The severity of the damage was heavier than before and continued till February 1959, there being three distinct and successive waves of the caterpillars.

Nature and Extent of Damage

The caterpillar is a leaf feeder. It hides between the tillers in the lower portion of the clump during the day and comes out late in the evening or early in the morning to feed on the leaves. The damage inflicted is terrific since the entire crop is defoliated.

The estimated loss of the crop in money value due to this pest during 1952-53 has been computed to be about Rs. 12,000, and during 1958-59 about Rs. 15,000.

Life-History

The moth lays its whitish spherical eggs on the plants in groups of 3 to 6. The caterpillar is fleshy and stout, with hairs all over its body. The first five and the last abdominal segments are dark-coloured and provided with dark tufts of hair on the dorsal side. Other segments are yellowish, with brownish hairs. The head is small and light brown. The full-grown caterpillar measures about 3 cm. in length. Pupation takes place between the interspaces of the tillers in the lower portions of the clumps, inside a dark brown oval cocoon of silk. The moth is stout with plumose antennae. The wings are brown in colour, with four spots in a line in the middle of the forewing (Photograph). The life-cycle is completed in about a month.

Alternative Hosts

The pest was observed to feed only on guinea grass, though extensive areas of cereal crops like paddy, ragi, etc., were available near by. It has been recorded as affecting Casuarina in Andhra State by Perraju *et al.* (1959).

Control Measures

The onslaught of the insect during 1950 was so sudden that no control measures could be contemplated. During 1952-53, B.H.C. and toxaphene were applied as 0.1% sprays, but the results were not satisfactory. As an alternative, the stubble was burnt in small blocks and the crop was replanted in fresh areas.

During 1958-59, B.H.C. 10% dust was tried, but only the earlier

instars of the caterpillars were found susceptible. The grown-up caterpillars were not affected and they pupated normally. Such pupae were parasitised by the hymenopterous parasites, viz. *Tetrasticus* sp. and *Hockeria* sp. to an appreciable degree.

The treatment of the pest with B.H.C. during earlier instars does not seem to have affected the parasitation and development of these endoparasites.

Guinea grass being a fodder crop, the insecticides had to be used with due precautions and their application was meticulously stopped four weeks before the cutting. By feeding the grass after this period no deleterious effect was noticed on the cattle.

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16. CORRECT NAME OF THE ASIATIC BUTTERFLY HITHERTO KNOWN AS *DANAUS* (OR *PAPILIO*) *PLEXIPPUS*

There has been prolonged controversy as to whether the American Monarch Butterfly or the Asiatic species known as the Common Tiger had prior claim to the name *Danaus plexippus* (Linnaeus). Both these species have passed under the same name for many years. Rev. E. M. Shull recently sent us a copy of the letter received by him from Dr. Charles L. Remington of the Department of Zoology, Yale University, in which the latter points out that, on the basis of full evidence, the International Commission on Zoological Nomenclature has ruled (Opinion No. 282 published 1 October 1954) that the name hitherto used for the Asiatic butterfly is in fact correctly applicable